

# TestStand Development for Production Testing

## The Challenge

A global defense contractor needed to quickly implement a manufacturing test process for a new power inverter system coming to market with unexpected demand. The customer needed to reduce test time from several hours to 20 minutes per unit, but had a very limited time frame to implement improvements.

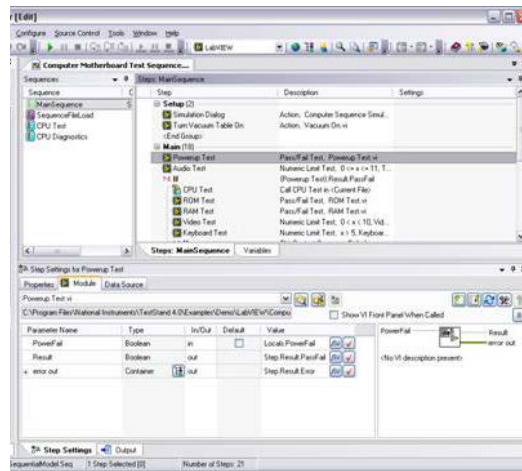
## The Solution

The client relied on PVI Systems to help design and implement a new test sequence for production testing. The testing needed to perform production dielectric/highpot, in-circuit and functional testing.

Hardware test stands were controlled with National Instruments devices. The main software components for controlling the hardware were developed using LabVIEW, including the featured devices listed. Test processes are controlled using TestStand sequences developed by PVI to customer specifications.

## Features

- On-site rapid response
- Test planning support
- NI TestStand sequence development
- Device communication via CAN
- NI 5114 digitizer
- NI Current, Voltage, Digital I/O and Relay Modules
- NI cDAQ-9178 chassis
- AC and DC contactors and loads
- Custom instrumentation via RS-232 serial commands
- Agilent 34401a DMM
- High Power DC supply



## Deployment

For more information, contact us at [info@pvisys.com](mailto:info@pvisys.com).

PVI worked alongside the customer's own engineering team to develop the test systems and processes ahead of manufacturing schedule. A second manufacturing line was later added to reduce downtime and provide additional capacity.